

AMENDMENTS TO THE CLAIMS

1. **(Withdrawn)** A vaccine comprising a nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:6.

2. **(Currently Amended)** A test kit comprising a monospecific antisera that recognizes a BabA antigen and comprises an immunoglobulin that binds said BabA antigen via a variable region, wherein said Bab A adhesin protein is produced using an isolated and purified bacterial blood group antigen binding protein (BabA) from *Helicobacter pylori* species, wherein said BabA protein binds specifically to fucosylated Lewis<sup>b</sup> type I and H-1 blood group antigen-glycoconjugates and,

wherein said BabA protein contains less than 20% bacterial protein impurities, has a molecular weight in the interval of 73 to 75 kDa as determined by sodium dodecyl sulphate-polyacrylamide gel electrophoresis (SDS-PAGE), and is not a HopA, HopB, HopC, HopD, or HopE protein.

3. **(Currently Amended)** An isolated monospecific immunoglobulin composition which recognizes a BabA antigen and binds said BabA antigen via a variable region and exhibits specific activity to a BabA adhesion protein from *Helicobacter pylori*, wherein said adhesin protein binds Lewis<sup>b</sup> and H-1 blood group antigen-glycoconjugates and is not a HopA, HopB, HopC, HopD or HopE protein.

4. **(Currently Amended)** The immunoglobulin composition according to claim 3, wherein said BabA adhesin protein has a molecular weight in the interval of about 70 to 77 kDa as determined by SDS-PAGE.

5. **(Currently Amended)** The immunoglobulin composition according to any one of claims 3 or 4 wherein said BabA adhesin protein comprises the following amino acid sequence: EDDGFYTSVGYQIGEEAQMV (SEQ ID NO:5) or homologues thereof.

6. **(Currently Amended)** An isolated monospecific antibody, which recognizes a BabA antigen and binds said BabA antigen via a variable region and exhibits specific activity to a BabA adhesion protein from *Helicobacter pylori* that binds Lewis<sup>b</sup> and H-1 blood group antigen-glycoconjugates and is not a HopA, HopB, HipC, HopD or HopE protein.

7. **(Currently Amended)** The antibody according to claim 6, wherein said BabA adhesin protein has a molecular weight in the interval of about 70 to 77 kDaas determined by SDS-PAGE.

8. **(Currently Amended)** The antibody according to any one of claims 6 or 7, wherein said BabA adhesin protein comprises the following amino acid sequence:  
EDDGFYTSVGYQIGEEAAQMV (SEQ ID NO:5) or homologues thereof.

9. **(Original)** The antibody according to claim 6, wherein said antibody is a monoclonal antibody.

10. **(Withdrawn)** A method of manufacturing an immunoglobulin composition according to claim 3, comprising the following steps:

immunizing an animal with Lewis<sup>b</sup> binding protein or fractions thereof, expressed by *Helicobacter pylori*,

isolating the immunoglobulin fraction from an excretion of said host animal, and  
purifying of the immunoglobulin preparation.

11. **(Withdrawn)** The method according to claim 10, wherein said animal is a cow and the immunoglobulin fraction is isolated from the milk, preferably the colostrum thereof.

12. **(Withdrawn)** The method according to claim 10, wherein said animal is a chicken and the immunoglobulin fraction is isolated from the egg yolk thereof.

13. **(Previously Presented)** A method of manufacturing an antibody according to claim 6, wherein the method comprises the following steps:

immunizing an animal with a Lewis<sup>b</sup> binding protein (BabA) or fractions thereof, expressed by *Helicobacter pylori*, fusing immunised, immunoglobulin producing cells with a neoplastic cell line, selecting and growing cells expressing said antibody, and purifying the antibodies.

14. **(Withdrawn)** The method of claim 13, further comprising expressing said antibody by a culture of viable microorganisms in an expression system, where said microorganism or organisms are generally recognized as safe (GRAS) and genetically modified to express said antibody.

15. **(Withdrawn)** The method according to claim 14, wherein said microorganism is selected from the group consisting of bacteria of the species *Lactobacillus*, *Staphylococcus* and Enterobacteriaceae.

16. **(Previously Presented)** A pharmaceutical preparation for the treating and/or preventing of *Helicobacter pylori* infection, gastric ulcers or acid peptic disease in humans comprising the immunoglobulin composition according to claim 3.

17. **(Cancelled)**

18. **(Cancelled)**

19. **(Previously Presented)** A pharmaceutical product for the treating and/or preventing of *Helicobacter pylori* infections, gastric ulcers or acid peptic disease in humans, comprising the antibody according to claim 6.

20. **(Cancelled)**

21. **(Cancelled)**

22. **(Withdrawn)** A method for treating and/or preventing *Helicobacter pylori* infections in a human, comprising the step of orally administering an effective amount of an immunoglobulin composition to claim 3 to said human.

23. **(Withdrawn)** A method for treating and/or preventing *Helicobacter pylori* infections in a human, comprising orally administering an effective amount of an antibody according to claim 6 to said human.

24. **(Withdrawn)** A method of treating and/or preventing *Helicobacter pylori* infections in a human, said method comprising orally administering an effective amount of a culture of viable microorganisms in an expression system, wherein said microorganism or organisms are generally recognized as safe (GRAS) and genetically modified to express an antibody according to any one of the claims 8 to 9.

25. **(Original)** An expression system, comprising a culture of viable microorganisms wherein said microorganism or organisms are generally recognized as safe (GRAS) and genetically modified to express an antibody according to any one of claims 8-9.

26. **(Withdrawn)** A method for treating and/or preventing *Helicobacter pylori* infections in humans, said method comprising orally administering an effective amount of a culture of viable microorganisms in an expression system, wherein said microorganisms or organisms are generally recognized as safe (GRAS) and genetically modified to express an adhesion protein according to claim 1.

27. **(Currently Amended)** The composition according to claim 4, wherein the molecular weight of said BabA adhesin protein is in the interval of 73 to 75 kDa.

28. **(Currently Amended)** The composition according to claim 4, wherein the molecular weight of said BabA adhesin protein is about 73.5 kDa.

29. **(Currently Amended)** The antibody according to claim 6, wherein the molecular weight of said BabA adhesin protein is in the interval of 73 to 75 kDa.

30. **(Currently Amended)** The antibody according to claim 4, wherein the molecular weight of said BabA adhesin protein is about 73.5 KDa.